

## CLAIMS

1. A fuel cell device capable of outputting a  
signal representing a residual hydrogen amount,  
5 comprising:

a tank section for accommodating a plurality  
of hydrogen storage alloys having mutually different  
hydrogen desorbing characteristics;

a power generating section for generating  
10 electric power by using hydrogen desorbed from the tank  
section;

a pressure detecting unit for detecting a  
pressure of the hydrogen supplied to the power  
generating section; and

15 an output section for outputting pressure  
variations caused on the basis of hydrogen desorbing  
characteristics of the plurality of hydrogen storage  
alloys which are detected by the pressure detecting  
unit.

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2. The fuel cell device capable of outputting a  
signal representing a residual hydrogen amount  
according to claim 1, wherein the plurality of hydrogen  
storage alloys are accommodated in the tank section  
25 such that a mixing ratio of the plurality of hydrogen  
storage alloys can be changed.

3. The fuel cell device capable of outputting a signal representing a residual hydrogen amount according to claim 1, wherein the tank section has a space for independently accommodating the plurality of hydrogen storage alloys having the different hydrogen desorbing characteristics.

4. The fuel cell device capable of outputting a signal representing a residual hydrogen amount according to claim 1, wherein the output section produces different output signals depending on a plurality of pressure equilibrium states occurring according to the hydrogen desorbing characteristics of the plurality of hydrogen storage alloys.

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5. The fuel cell device capable of outputting a signal representing a residual hydrogen amount according to claim 1, wherein the output section produces signals representing pressure variations in response to changes in a plurality of pressure equilibrium states occurring according to the hydrogen desorbing characteristics of the plurality of hydrogen storage alloys.

25 6. A method for outputting a signal representing a residual fuel cell capacity in a system including a tank section for accommodating a plurality of hydrogen

storage alloys having mutually different hydrogen desorbing characteristics and a power generating section for generating electric power by using hydrogen desorbed from the tank section, comprising:

5           a pressure detecting step of detecting a pressure of the hydrogen supplied to the power generating section; and

          an outputting step of outputting pressure variations caused on the basis of hydrogen desorbing  
10 characteristics of the plurality of hydrogen storage alloys which are detected in the pressure detecting step.

7. The method for outputting a signal representing  
15 a residual fuel cell capacity according to claim 6, wherein the plurality of hydrogen storage alloys are accommodated in the tank section such that a mixing ratio of the plurality of hydrogen storage alloys can be changed.

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8. The method for outputting a signal representing a residual fuel cell capacity according to claim 6, wherein the tank section has a space for independently accommodating the plurality of hydrogen storage alloys  
25 having the different hydrogen desorbing characteristics.

9. The method for outputting a signal representing

a residual fuel cell capacity according to claim 6,  
wherein the outputting step produces different output  
signals depending on a plurality of pressure  
equilibrium states occurring according to the hydrogen  
5 desorbing characteristics of the plurality of hydrogen  
storage alloys.

10. The method for outputting a signal  
representing a residual fuel cell capacity according to  
10 claim 6, wherein the outputting step produces signals  
representing pressure variations in response to changes  
in a plurality of pressure equilibrium states occurring  
according to the hydrogen desorbing characteristics of  
the plurality of hydrogen storage alloys.

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11. An electronic device capable of detecting a  
residual capacity of a fuel cell device, comprising:  
a tank section for accommodating a plurality  
of hydrogen storage alloys having mutually different  
20 hydrogen desorbing characteristics;  
a power generating section for generating  
electric power by using hydrogen desorbed from the tank  
section;  
a pressure detecting unit for detecting a  
25 pressure of the hydrogen supplied to the power  
generating section;  
a residual amount detecting unit for detecting

a residual hydrogen amount by using pressure variations caused on the basis of hydrogen desorbing characteristics of the plurality of hydrogen storage alloys which are detected by the pressure detecting unit; and

a control unit which operates with the electric power supplied from the power generating section.

12. The electronic device capable of detecting a residual capacity of a fuel cell device according to claim 11, wherein the plurality of hydrogen storage alloys are accommodated in the tank section such that a mixing ratio of the plurality of hydrogen storage alloys can be changed.

13. The electronic device capable of detecting a residual capacity of a fuel cell device according to claim 11, wherein the tank section has a space for independently accommodating the plurality of hydrogen storage alloys having the different hydrogen desorbing characteristics.

14. The electronic device capable of detecting a residual capacity of a fuel cell device according to claim 11, further comprising a display unit for displaying a residual hydrogen amount based on a

detection result obtained by the residual amount detecting unit.

15. A method for detecting a residual fuel cell  
5 capacity of an electronic device including a tank  
section for accommodating a plurality of hydrogen  
storage alloys having mutually different hydrogen  
desorbing characteristics and a power generating  
section for generating electric power by using hydrogen  
10 desorbed from the tank section, comprising:

a pressure detecting step of detecting a  
pressure of the hydrogen supplied to the power  
generating section;

a residual amount detecting step of detecting  
15 a residual hydrogen amount by using pressure variations  
caused on the basis of hydrogen desorbing  
characteristics of the plurality of hydrogen storage  
alloys which are detected in the pressure detecting  
step; and

20 a control step of causing a control section to  
operate with the electric power supplied from the power  
generating section.

16. The method for detecting a residual fuel cell  
25 capacity of an electronic device according to claim 15,  
wherein the plurality of hydrogen storage alloys are  
accommodated in the tank section such that a mixing

ratio of the plurality of hydrogen storage alloys can be changed.

17. The method for detecting a residual fuel cell  
5 capacity of an electronic device according to claim 15,  
wherein the tank section has a space for independently  
accommodating the plurality of hydrogen storage alloys  
having the different hydrogen desorbing characteristics.

10 18. The method for detecting a residual fuel cell  
capacity of an electronic device according to claim 15,  
further comprising a display step of displaying a  
residual hydrogen amount based on a detection result  
obtained in the residual amount detect step.

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